

For the scenario below identify the **entities**, their **attributes** and appropriate **keys**

Finsbury Happy Zoo

Finsbury Happy Zoo's concept is to show animals together in their habitats. They have a number of **enclosures** of different **habitat types** (such as forest or tundra), different **sizes** (square metres), each having a **main feature** (such as a stream or a cave). **Animals** of different species share the same enclosure. Each enclosure has a **unique number** and there can be several enclosures with the same habitat but with a different main feature or of a different size. Each **animal** has a **unique ID**, and their **name**, **date_of_birth**, **diet** and description are stored. When an animal is put in an enclosure, the **start date** is recorded, and if they are transferred to another enclosure the **end date** is recorded. Zoo keepers may need to make a **note** about a particular animal, for example "not eating well today" and this is recorded along with the **date**. To make sure the animals don't eat each other a species **compatibility table** is maintained which has the following information; **speciesA**, **speciesB**, **compatibility_rating** (5 for happy neighbours to 1 for bitter enemies). Species are identified by their **name**, and a **description of the species and their habitat type** are recorded. Species are matched against enclosures by Zoo staff, and if suitable the **maximum number of animals** of a particular species for a particular enclosure is recorded to prevent overcrowding.

Enclosure (Entity)

- Enclosure Number (Primary Key)
- Habitat Type
- Main Feature
- Size
- Maximum Number of Animals

Animal (Entity)

- Animal ID (Primary Key)
- Name
- Date of Birth
- Diet
- Start Date
- End Date

Species Compatibility

- Species A + Species B (Composite Key)
- Compatibility (1-5)

Species (Entity)

- Name (Primary Key)
- Description
- Habitat Type